

BRIDGESTONE ZERO LANDFILL INITIATIVE

*Presented by: John Wheeler
November 5, 2014*



Environmental Mission Statement

To help ensure a healthy environment
for current and future generations...

We, the Bridgestone group, are committed to continually working toward a sustainable society with integrity and in unity with our customers, partners, communities and the world around us.

Therefore, we are focused on three objectives.



**In harmony
with nature**

To contribute to biodiversity through habitat enhancement, and through environmental education and research.



**Value natural
resources**

To continually improve natural resource conservation through operational improvements and product design.



**Reduce CO₂
emissions**

To continually reduce emissions of Greenhouse Gases, including CO₂, from our products' complete life cycle.

The Bridgestone group's environmental mission covers all aspects of our business.



TEAMS: Total Environmental Advanced Management System
TEAMS unites the group under a progressive management system to help ensure a healthy environment.

One Team, One Planet.



At the End of the Road Your Tires Keep Going.

- Our goal is to ensure that for every tire we sell in the U.S. another tire goes to a valuable re-use.
- Tires are re-used as cushioning material for playgrounds, rubberized asphalt to build roads and as a source of energy and materials to make new tires.
- We support community clean-up programs to make valuable use of tires collected from public spaces or waterways.



www.OneTeamOnePlanet.com

Types of waste

- Production
- Administrative Support
- Maintenance and Facilities Support
- Break Room

Define Zero Landfill

- Production Waste Only
- All Waste

Zero means nothing goes to Landfill

- 100% of waste is diverted from landfill

Step 2: Analysis of Data

	Aiken	Bloomington	Des Moines	Joliet	LaVergne	Monterrey	Warren	Wilson
1	Rubber	Electronic Parts	Bladders	Banbury sludge	recycled green	Cured Tires	Cardboard	Rubber
2	Compactor	Fluorescent and HID light bulbs	Cardboard	Clean carbon black	scrap tires	Green Tires Recycled	Mixed Paper	Tires
3	Special Waste (Carbon Black & Soap Sudge)	Fabric Scrap	Paper	Dirty carbon black	metal	Green Tires Disposal	Metal ferrous or mixed	Bladders
4	Carbon Black, Soap Sudge, Blast Media	General Refuse	Friction	Paper	wood	Waste Rubber	Metal nonferrous	Compactor
5	Bulk	Green Waste	Hazardous Waste	Carboard - clean	oil	Contaminated and Cure Rubber	Plastic	Misc trash
6	VW Solids	Hazardous Waste	Light Bulbs & Computer Monitors	Dirty carboard and paper bags of chemicals	paper	Scrap black plastic pallets	Used Oil	Café
7	Recyclables (incl cafeteria cardboard)	Non Hazardous Waste	Open-Top Waste	Supersacks of chemical	plastic	Carbon Black Waste	Steel Cord	Pin Vents
8	Carbon Black/ Soap Sudge/ Blast Media - WTE	Non Hazardous RCRA Empty Steel Drums	Packer Waste	Settling silt - liquid	retread	Empty carbon black super sacks	Nylon compound	Misc waste
9	Used Oil	Non Hazardous RCRA Empty Poly/Fiber Drums	Plastic Pallets	Settling silt - solids	landfill tons	Metal	Bladders	Mixing Dust
10	Lead Acid Batteries	Paper	Plastic	Trash	TBR scrap tires	Scrap rolled steel	Rubber compound	Waste Dope
11	Ni/Cd Batteries	Parts Washer	Rubber (sell)	Run out from steelastic		Scrap nylon yarn	Beads	Mixed Pigment
12	Parts Washer Solution	Plastic	Rubber Waste	Metal		Yellow rubber scrap	AGV pallets	Oily Debris
13	Hazardous Waste	Recyclables	Scrap Metal	Pigments		Copper scrap	Wood & wood pallets	Soap Sludge
14	Bladders	Scrap Curing Bladders	Scrap Tires (Plant)	PLASTIC (SHRINK-WRAP/MOISTURE BARRIER...)		Cardboard	Cured tires	Soap Sludge
15	Rubber	Scrap Metal	Scrap Tires (Adjustments)	Solvant		Pigments waste	Green tires	Banbury Sludge
16	Body Fly	Scrap Metal	Soap Sludge	Pins vent and buffing		Pigments waste (BANBURY)	ballasts	Carbon Black
17	Pin Vents	Scrap Tires OTR	Special Waste	Bladders		Used oil	Batteries (all)	Used Oil
18	Rubber Dust	Slip Sheets	Used Oil (Hydraulic oil/water)	Green scrap tire		Used and empty containers of different sizes	Miscellaneous (recycle)	Batteries
19	Tire Beads	Uncured Rubber		Polyester / Nylon		Rags, gloves contaminated with oil	Compactor	Parts Washer Solution
20	Cardboard	Wood Pallets		Steel wire		Empty bags of chemicals	Rubber&Wire	Hazardous Waste
21	Paper			Rubber(slab, push out...)		Oily sludges	Misc. waste (ldf)	Solvent Rags
22	Wood Pallets			Friction scrap		Water contaminated w/ chemicals		Rubber
23	Plastic Pallets, Misc Plastic			Cured scrap tire		Wood and Common waste		Cardboard
24	Slip Sheets			Used oils		PTAR's Sludge		Paper
25	Black Plastic			Oily absorbants		Forklift used batteries		Plastic
26	Plastic Linners and Creel Room Bags			Glove		Fluorescent lamps		Single Stream
27	Fabric			Wood		Waste sharps used		Bladders
28	Scrap Metal			Battery		Residuos infecciosos no anatómicos		Pin Vents
29	Creel Wire			Lamps		Farmacos caducos		Scrap Metal
30	Computer Monitors, Electronics			Wax - Other non recycled		Used batteries		Computer Monitors
31	Light Bulbs			Electronic equipments		Ballasts used without PCB		Light Bulbs
32	Green Tires			Qa scrap tire		Waste Thermometers		Medical Waste
33	Scrap Tires			Beads				Tires
34	Oily Rags/ Oily Waste/ Oil Sudge			Steel ply				Pallets
35								Green Rubber w/ wire
36								Misc.

Evaluate how your waste stream is collected.

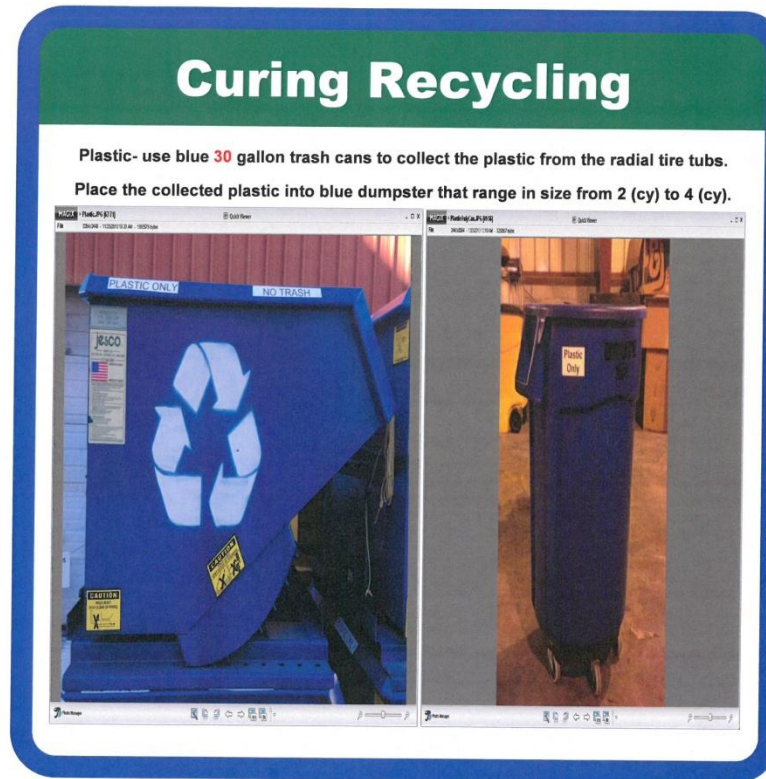


Step 3: Propose and Implement Plan

Provide Waste Specific Hampers



Design and Provide Recycling Specific Training



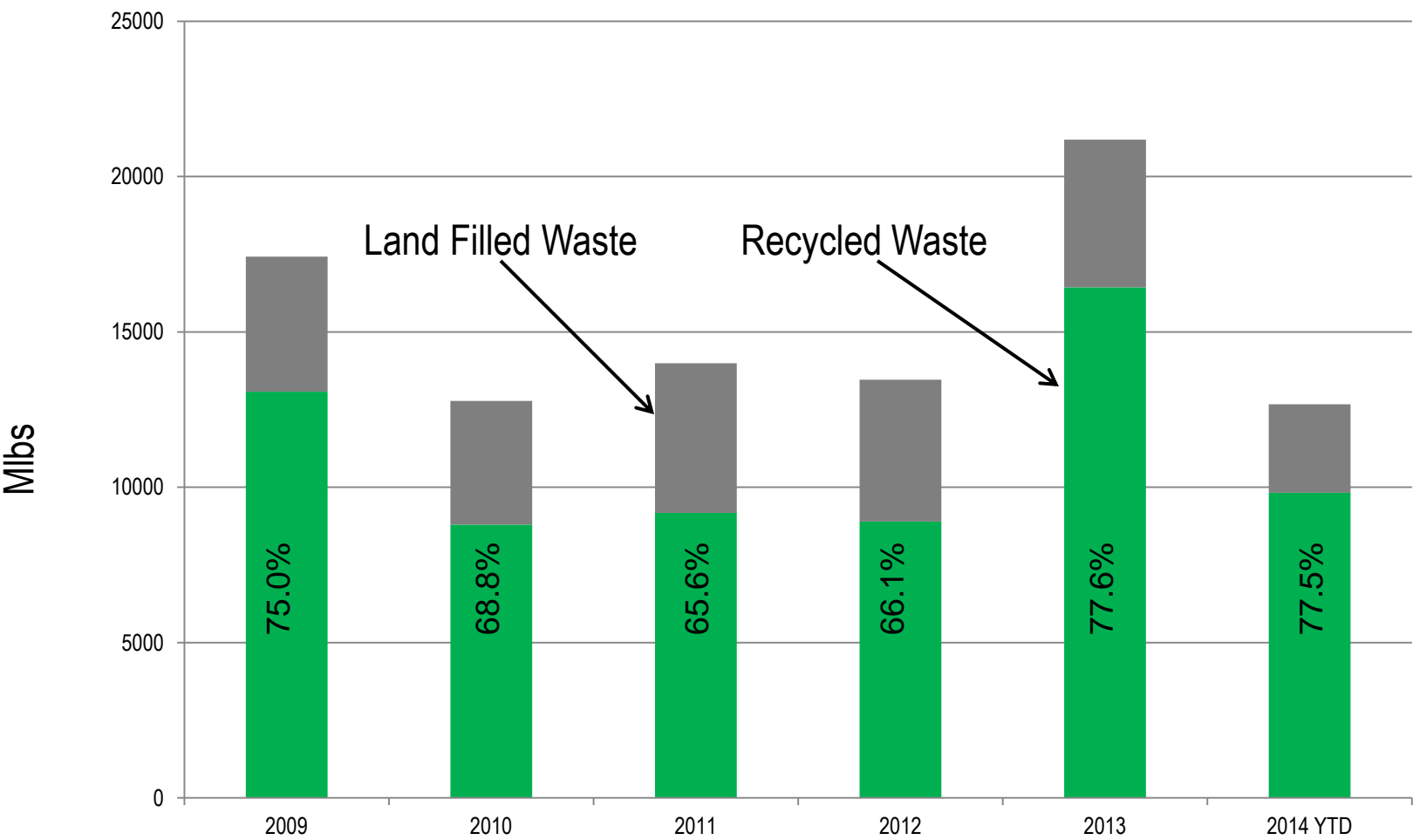
Standard Number	Process		Issuing Dept. Mgr	Issue #
CS-983-915	Environmental			1
Item: Curing Recycling				
Purpose: To keep plastic from the radial tire tubs only in blue dumpster.				

FM-762-012

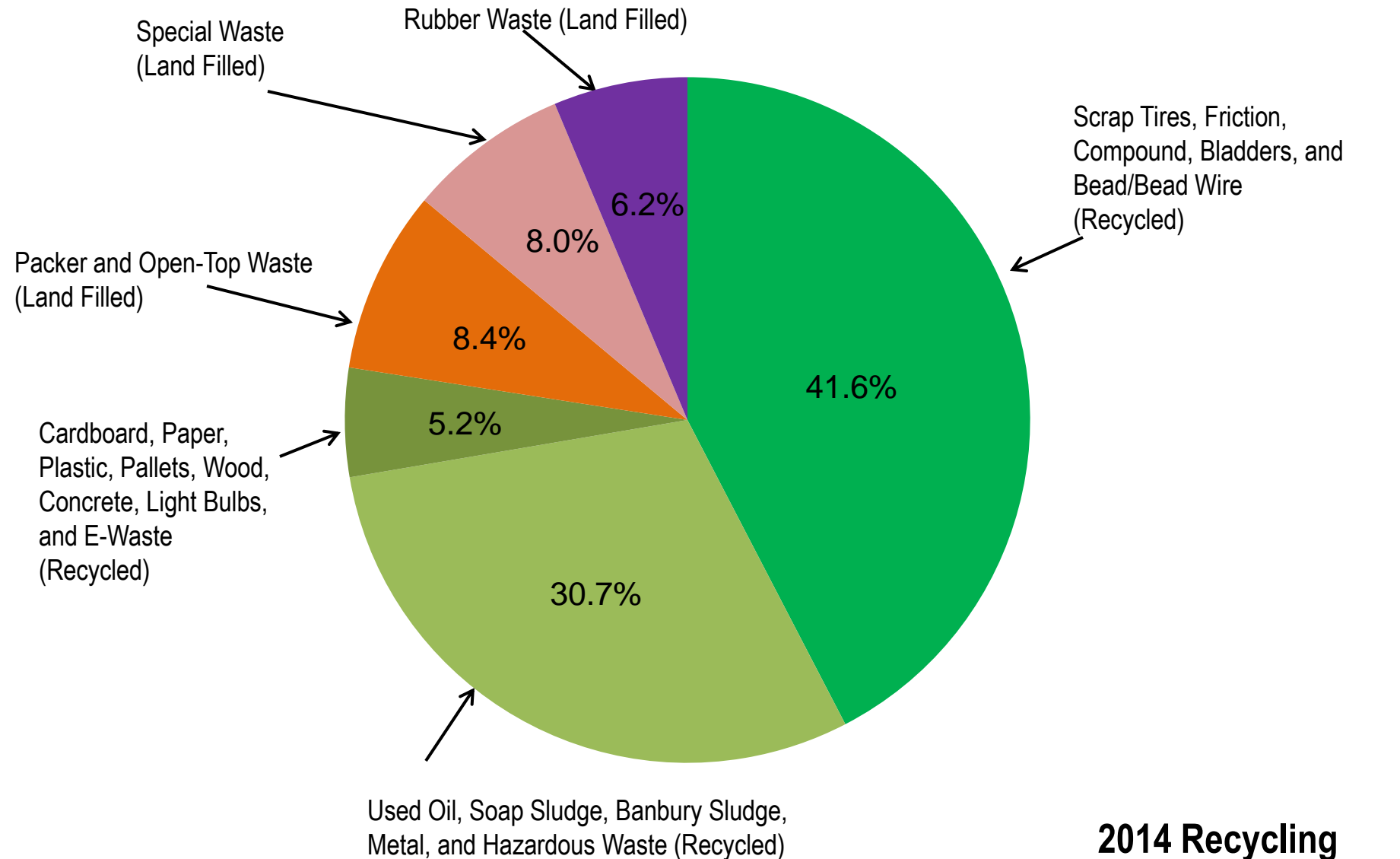
1/15/2010

Track and Observe Recycling Efforts





2014 Disposal Summary



**2014 Recycling
January - August
77.5%**

Successes

- Increased Recycling Percentage – 77.5%
- Internship Through Iowa DNR P2P Program
- Continuous Employee Education
- Bridgestone Has 2 Plants Achieve Zero Landfill

Challenges

- Local Outlets for Recyclable Waste Streams
- Waste to Energy Option for Non-Recyclables



Questions?